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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/527,854 | 03/16/2005 | Tobias Georg Tolle | DE 020213 | 1807 |
| 24737 | 7590 | 12/29/2005 | EXAMINER | |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510 | | | LAXTON, GARY L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2838 | |

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,854

Applicant(s)

TOLLE ET AL.

Examiner

Gary L. Laxton

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/16/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 3/16/05 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Inventorship

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Specification

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

4. The disclosure is objected to because of the following informalities: headings in the specification are missing.

Appropriate correction is required.

Claim Objections

5. Claims 1-11 are objected to because of the following informalities:

Claim 1 recites the limitation "the timing" in line 11. There is insufficient antecedent basis for this limitation in the claim. Claims 2-10 inherit the same through dependency.

Claim 3 recites the limitation "the voltage across the second switching element" in line 4. There is insufficient antecedent basis for this limitation in the claim. Claims 4-6 inherit the same through dependency

Claim 6 recites, "the value of the minimum" in line 6, this is vague. Minimum what?

Claim 8 recites the limitation "the onset of operation" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the nominal output current" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the timing" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the switching elements" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the timing" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-11, the phrase "in the case of" in claim 1 line 16 and the phrase "in the event of" in claim 11 line 10, render the claims indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Furthermore, claims 1 and 11 are written in the alternative (see claim 1 line 14: "shoot through current occurs or freewheeling" and claim 1 line 20: "and, if"; and see claim 11 line 9: "in the event of", and line 13: "and, if"), which render the claims indefinite since it is unclear whether the limitations are part of the claimed invention or not.

Because it is unclear whether the limitation(s) noted above are part of the claimed invention, they will be given no patentable weight.

Claim 2 has the same issue as claims 1 and 11; and therefore, is indefinite as well.

Claim 3 recites the limitation "the voltage variation" in line 7. There is insufficient antecedent basis for this limitation in the claim. Claim 3 is also drafted in the alternative and poses indefinite problems as well. Claims 4-6 inherit the from claim 3.

Claim 4 recites the limitation "the exterior" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "additional measuring lines" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the peak value" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the oscillation voltage" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the forward voltage" in lines 6 and 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 line 1 recites a drive device for a converter circuit as claimed in claim 1. Claim 1 claimed a converter circuit.

Claim 10 has the same issue as claims 1 and 11 supra, concerning the alternative drafting and the indefinite limitations of "in the event of", etc; and therefore, is indefinite as well

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claims 1-11 are rejected under 35 U.S.C. 102(a) as being anticipated by Bridge (US 6,936,250 – cited by applicant).

Due the vague and indefinite nature of the present claim drafting and claim limitations, it is considered that Bridge anticipates the claimed invention. Bridge discloses a converter circuit with first and second switching elements with a freewheel diode and an inductive element that flows current and a control device to control the switching of the switches to control the current flow through the inductor and to implement programmable delays.

10. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Jovanovic et al (US 6,028,418).

Due the vague and indefinite nature of the present claim drafting and claim limitations, it is considered that Jovanovic et al anticipate the claimed invention. Jovanovic et al disclose a converter circuit with first and second switching elements with a freewheel diode and an inductive element that flows current and a control device to control the switching of the switches to control the current flow through the inductor; and wherein the first and second switches conduct simultaneously with overlap conduction.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Easthom Karl can be reached on (571) 272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'G. Laxton', with a stylized flourish at the end.

Gary L. Laxton
Primary Examiner
Art Unit 2838

12/26/2005